



**STATE OF TENNESSEE
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL
Lab Services - Jackson Regional Lab
Jackson, TN 38301
731-426-0686

TDH: Lab Services KRL
Lab Services - Knoxville Regional Lab
Knoxville, TN 37920
865-549-5201

TDH: Lab Services NCL
Lab Services - Nashville Central Lab
Nashville, TN 37243
615-262-6300

Sent To: Geoff Klein
TDEC-DWS
200 East Race St
Knoxville, TN 37763

Lab ID: N00004494
Nashville Central Laboratory

Sampling Agency: TDEC: Division of Water Supply

Billing Code: 327.39-12

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: N00004494001
Project Name:
Sample Description: KINGSTON WTP
Sampler Project Name: RAW

Project Site No.:

Station No.:

Date/Time Collected: 05/11/2009 09:30

Sampler's Name: GOEFF KLEIN

County: ROANE - 73

Sample Matrix: Water

EFO: Knoxville

Sampling Agency: TDEC-DWS

Billing Code: 327.39-12

Send Report To: TDEC-DWS

Agency Invoiced: TDEC-DWS

Priority Date:

Date/Time Received: 05/11/2009 12:15

Received By: P Singh

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow:

CFS

| TEST: Alkalinity, Total | | | METHOD: EPA 310.2 | | | |
|-------------------------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 58 | mg/L | 3.8 | 10 | M Chen | 5/12/2009 |

| TEST: Hardness, Calcium | | | METHOD: SM 3500-Ca D | | | |
|-------------------------|--------|-------|----------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 46 | mg/L | 0.7 | 1 | M Chen | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004494002
Project Name:
Sample Description: KINGSTON WTP
Sampler Project Name: FINISH
Project Site No.:

Station No.:
Date/Time Collected: 05/11/2009 09:35
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:

Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:

Chlorine, residual:

Conductivity:

Temperature:

Dissolved Oxygen:

Other:

Flow:

CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 58 | mg/L | 3.8 | 10 | M Chen | 5/12/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 46 | mg/L | 0.7 | 1 | M Chen | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004494003
Project Name:
Sample Description: ROCKWOOD WTP
Sampler Project Name: FINISH
Project Site No.:
Station No.:
Date/Time Collected: 05/11/2009 10:15
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Alkalinity, Total | | METHOD: EPA 310.2 | | | | |
|-------------------------|--------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 61 | mg/L | 3.8 | 10 | M Chen | 5/12/2009 |

| TEST: Hardness, Calcium | | METHOD: SM 3500-Ca D | | | | |
|-------------------------|--------|----------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 50 | mg/L | 0.7 | 1 | M Chen | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004494004
Project Name:
Sample Description: ROCKWOOD WTP
Sampler Project Name: RAW
Project Site No.:
Station No.:
Date/Time Collected: 05/11/2009 10:20
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Alkalinity, Total | | | METHOD: EPA 310.2 | | | |
|-------------------------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Total Alkalinity | 74 | mg/L | 3.8 | 10 | M Chen | 5/12/2009 |

| TEST: Hardness, Calcium | | | METHOD: SM 3500-Ca D | | | |
|-------------------------|--------|-------|----------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Calcium hardness | 52 | mg/L | 0.7 | 1 | M Chen | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

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U - Undetected



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615-262-6300

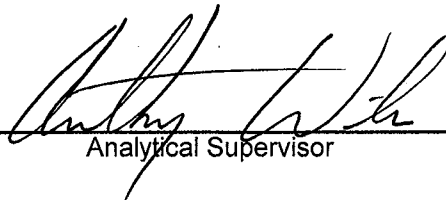
Sent To: Geoff Klein
TDEC-DWS
200 East Race St
Knoxville, TN 37763

Lab ID: N00004494
Nashville Central Laboratory

Sampling Agency: TDEC: Division of Water Supply

Billing Code: 327.39-12

This is to certify that the following results were determined using
good laboratory practices and in accordance with federal or state
approved methodologies.


Analytical Supervisor

Lab-Sample Number: N00004494001
Project Name:
Sample Description: KINGSTON WTP
Sampler Project Name: RAW
Project Site No.:
Station No.:
Date/Time Collected: 05/11/2009 09:30
Sampler's Name: GOEFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Digestion Metals | | METHOD: EPA 200.2 | | | | |
|------------------------|------------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 05/12/2009 | | | | S Ufegbu | 5/12/2009 |

| TEST: ICP-MS | | METHOD: EPA 200.8 | | | | |
|--------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Arsenic | U | µg/L | 0.93 | 5 | A Wilson | 5/12/2009 |
| Barium | 18 | µg/L | 2.5 | 5 | A Wilson | 5/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | A Wilson | 5/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | A Wilson | 5/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | A Wilson | 5/12/2009 |
| Cobalt | 0.18J | µg/L | 0.04 | 1 | A Wilson | 5/12/2009 |
| Lead | 0.30J | µg/L | 0.10 | 1 | A Wilson | 5/12/2009 |
| Manganese | 23 | µg/L | 0.42 | 1 | A Wilson | 5/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | A Wilson | 5/12/2009 |
| Thallium | 0.062J | µg/L | 0.03 | 1 | A Wilson | 5/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | A Wilson | 5/12/2009 |

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|-------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.029 | 0.2 | A Bass | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004494002
Project Name:
Sample Description: KINGSTON WTP
Sampler Project Name: FINISH
Project Site No.:
Station No.:
Date/Time Collected: 05/11/2009 09:35
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Digestion Metals | | | METHOD: EPA 200.2 | | | |
|------------------------|------------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 05/12/2009 | | | | S Ufegbu | 5/12/2009 |

| TEST: ICP-MS | | | METHOD: EPA 200.8 | | | |
|--------------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Arsenic | U | µg/L | 0.93 | 5 | A Wilson | 5/12/2009 |
| Barium | 17 | µg/L | 2.5 | 5 | A Wilson | 5/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | A Wilson | 5/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | A Wilson | 5/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | A Wilson | 5/12/2009 |
| Cobalt | 0.067J | µg/L | 0.04 | 1 | A Wilson | 5/12/2009 |
| Lead | U | µg/L | 0.10 | 1 | A Wilson | 5/12/2009 |
| Manganese | 3.2 | µg/L | 0.42 | 1 | A Wilson | 5/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | A Wilson | 5/12/2009 |
| Thallium | U | µg/L | 0.03 | 1 | A Wilson | 5/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | A Wilson | 5/12/2009 |

| TEST: Mercury | | | METHOD: EPA 245.1 | | | |
|---------------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.029 | 0.2 | A Bass | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004494003
Project Name:
Sample Description: ROCKWOOD WTP
Sampler Project Name: FINISH
Project Site No.:
Station No.:
Date/Time Collected: 05/11/2009 10:15
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Digestion Metals | | | METHOD: EPA 200.2 | | | |
|------------------------|------------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 05/12/2009 | | | | S Ufegbu | 5/12/2009 |

| TEST: ICP-MS | | | METHOD: EPA 200.8 | | | |
|--------------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Arsenic | U | µg/L | 0.93 | 5 | A Wilson | 5/12/2009 |
| Barium | 23 | µg/L | 2.5 | 5 | A Wilson | 5/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | A Wilson | 5/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | A Wilson | 5/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | A Wilson | 5/12/2009 |
| Cobalt | 0.068J | µg/L | 0.04 | 1 | A Wilson | 5/12/2009 |
| Lead | U | µg/L | 0.10 | 1 | A Wilson | 5/12/2009 |
| Manganese | 3.9 | µg/L | 0.42 | 1 | A Wilson | 5/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | A Wilson | 5/12/2009 |
| Thallium | U | µg/L | 0.03 | 1 | A Wilson | 5/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | A Wilson | 5/12/2009 |

| TEST: Mercury | | | METHOD: EPA 245.1 | | | |
|---------------|--------|-------|-------------------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.029 | 0.2 | A Bass | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

Lab-Sample Number: N00004494004
Project Name:
Sample Description: ROCKWOOD WTP
Sampler Project Name: RAW
Project Site No.:
Station No.:
Date/Time Collected: 05/11/2009 10:20
Sampler's Name: GEOFF KLEIN
County: ROANE - 73
Sample Matrix: Water
EFO: Knoxville
Sampling Agency: TDEC-DWS
Billing Code: 327.39-12
Send Report To: TDEC-DWS
Agency Invoiced: TDEC-DWS
Priority Date:
Date/Time Received: 05/11/2009 12:15
Received By: P Singh

Field Determinations

pH:
Chlorine, residual:
Conductivity:
Temperature:
Dissolved Oxygen:
Other:
Flow: CFS

| TEST: Digestion Metals | | METHOD: EPA 200.2 | | | | |
|------------------------|------------|-------------------|-----|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Digestion Metals | 05/12/2009 | | | | S Ufegbu | 5/12/2009 |

| TEST: ICP-MS | | METHOD: EPA 200.8 | | | | |
|--------------|--------|-------------------|------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Arsenic | U | µg/L | 0.93 | 5 | A Wilson | 5/12/2009 |
| Barium | 25 | µg/L | 2.5 | 5 | A Wilson | 5/12/2009 |
| Beryllium | U | µg/L | 0.11 | 1 | A Wilson | 5/12/2009 |
| Cadmium | U | µg/L | 0.41 | 1 | A Wilson | 5/12/2009 |
| Chromium | U | µg/L | 2.0 | 5 | A Wilson | 5/12/2009 |
| Cobalt | 0.13J | µg/L | 0.04 | 1 | A Wilson | 5/12/2009 |
| Lead | 0.36J | µg/L | 0.10 | 1 | A Wilson | 5/12/2009 |
| Manganese | 22 | µg/L | 0.42 | 1 | A Wilson | 5/12/2009 |
| Selenium | U | µg/L | 1.3 | 5 | A Wilson | 5/12/2009 |
| Thallium | U | µg/L | 0.03 | 1 | A Wilson | 5/12/2009 |
| Vanadium | U | µg/L | 3.4 | 5 | A Wilson | 5/12/2009 |

| TEST: Mercury | | METHOD: EPA 245.1 | | | | |
|---------------|--------|-------------------|-------|-----|--------------|-----------|
| ANALYTE | RESULT | UNITS | MDL | MQL | ANALYZED BY: | DATE |
| Mercury | U | µg/L | 0.029 | 0.2 | A Bass | 5/12/2009 |

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected